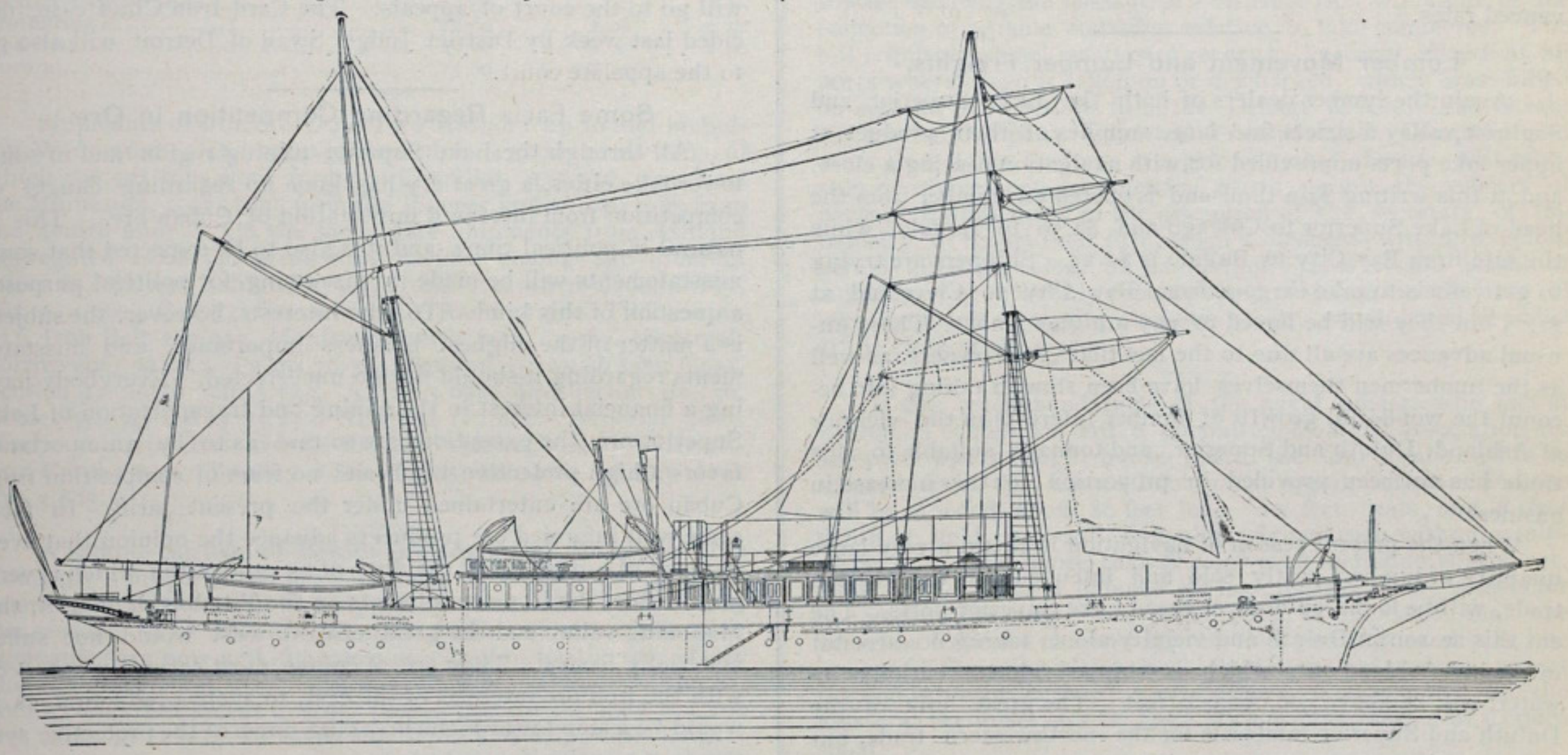
MARINE REVIEW.

VOL. VI. CLEVELAND, OHIO, THURSDAY, OCTOBER 27, 1892. No. 17.

The Auxiliary Steam Yacht Comanche.

The steam yacht Comanche, shown in the accompanying illustration, was built and engined by the Globe Iron Works Company, for Mr. H. M. Hanna at a cost of about $125,000. The engines were shown in a gravure supplement to the REVIEW of March 10, and were generally pronounced a model of design for triple expansion engine. The yacht is designed as an auxiliary sailing yacht, carrying some 4,000 yards of canvas on two masts, the foremast being square rigged. The dimensions of the hull are: length on load line, 165 feet; over all, 185 feet; beam, 25 feet; moulded depth, 14 feet 3 inches and mean draft 10 feet, the displacement being about 500 tons. The coefficient of fineness is about 68 per cent. The engines are 14, 23 and 36 inches by 24-inch stroke, steam being supplied by a Scotch boiler 12 by 9 feet, which is allowed a pressure of 160 pounds. There are many new features in the arrangement of the boat,one of which is in the location of the steering wheel, which is just in front of the funnel, leaving the top of deck saloon clear for promenading. The main cabin, from which a stairway leads to the dining room and guest chambers below and forward, is finished in oak, the electric light fixtures being ground glass enclosed in three oak leaves. At the after end of the main cabin are two recesses, the one on the port side being an armory and the one on the starboard containing charts and paraphernalia for navigation. The dining room is finished in ivory and gold and the walls are paneled in green silk. The dead lights in the state-rooms are ornamented with small shelves. The quarters of the captain and the crew are below and aft, the captain's apartments being more commodious than usual. A neat mess table is provided in the crew's quarters. Space is economized in this department by the use of hammocks. The engine room is lighted by incandescent lights. Two direct-connected Fisher plants furnish light for the 250 lamps.

The bulwarks are paneled with mahogany inside and the cabins are of the same wood. The jib-boom and rail is of teak. The hull is painted black, relieved by a gold band extending all the way round, just below the strake. This band terminates in handsome ornaments aft and in the figure head capped with shells. The "Comanche" was designed by Mr. A. U. Sheldon, formerly shipyard superintendent with the Vulcan Company, designer of the Saal and Lahn, and the drawing is by Mr. W. J. Wood.



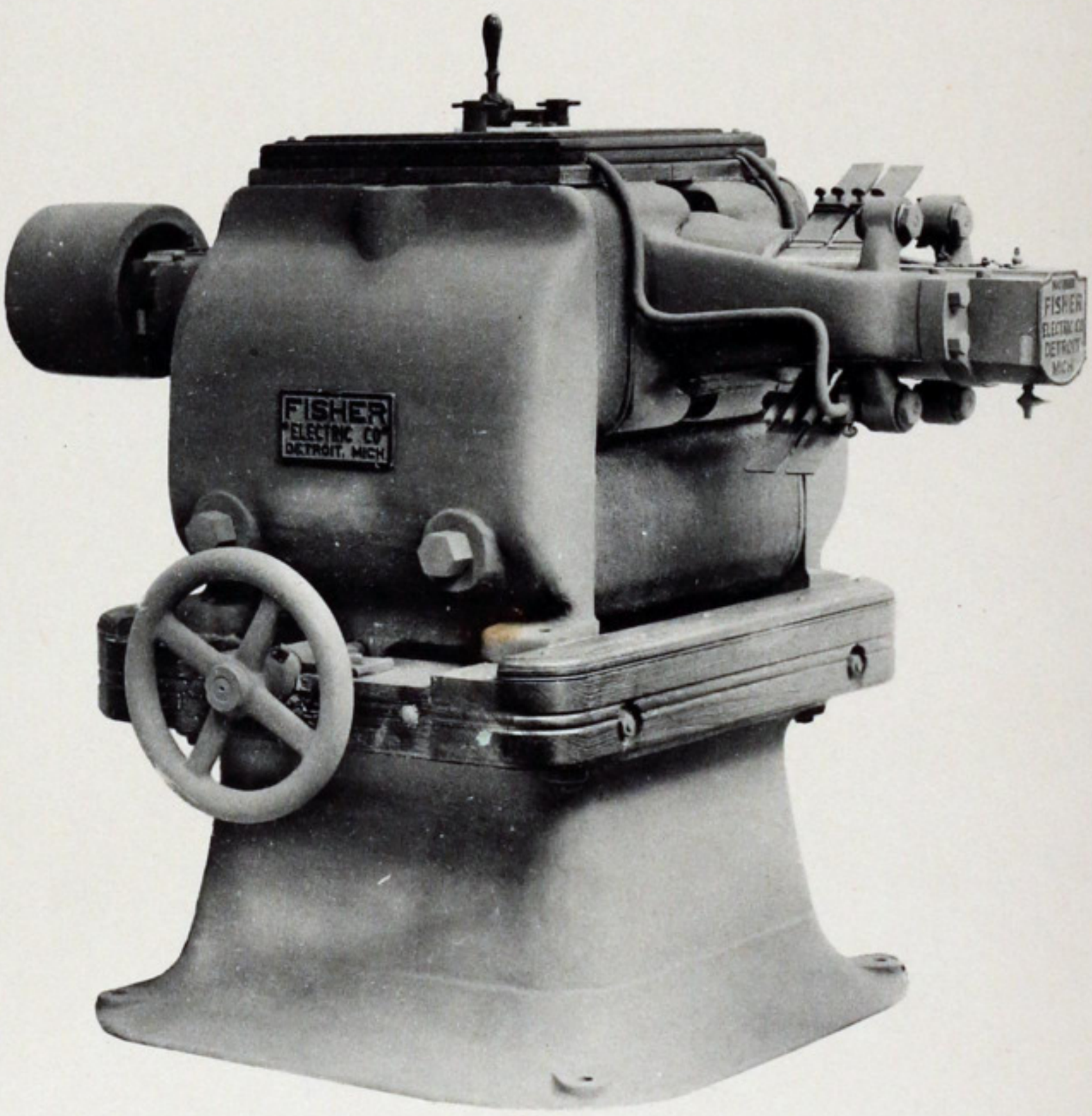
AUXILIARY STEAM YACHT COMANCHE.

The Largest Steamer on the Lakes.

The name of the large steel straightback building at the Wyandotte yards of the Detroit Dry Dock Company will be Selwyn Eddy, in honor of one of the firm of Eddy Bros. & Co., large ship owners and lumber men. The boat will be launched Saturday Nov. 5. She is 360 feet long and is 42 feet beam. For the rest of the season and until the Hawgood steamer comes out next spring the Eddy will be the largest boat on the lakes, and her carrying capacity will be in accordance with her size no doubt.

Innovation in Boat Building.

An English firm has made a seamless lifeboat, composed of two pressed steel plates. This boat it is claimed is better, more durable and cheaper than wooden or metalic life boats. The many boats usually carried by steamers are seldom in use and therefore are rendered so leaky by the action of the sun, weather, and heat radiated from the funnel casing, that they can not be relied upon to float when required. The new boats are built in two sheets of thin Siemens-Martin steel, pressed to the exact model of the desired size boat, and riveted together with a steel bulb bar between them, forming stern, keel, and sternpost, and can, if required, be galvanized all over, and afterwards painted with two coats of enamel or other composition. Gunwale strakes, seats, and bottom boards are fitted in usual manner, and a strong hook or ring bolt is fitted at each end for the reception of the boat lowering tackles or mooring gear. Cutters are fitted with buoyancy cases in bow and stern to insure flotation, even if the boat is filled with water. Lifeboats are, in addition, fitted with the usual bouyancy cases.—*Maritime Register.*



Supplement to MARINE REVIEW, Cleveland, O.

TYPE OF DYNAMO USED ON LAKE STEAMERS.

Prosperous Condition of Freights.

Lake vessel owners have never experienced a more satisfactory season of navigation than that now drawing to a close, and at no time during the entire season has the amount of freight offered for shipment been greater than at present. Delay from bad weather has been limited, the draft of water in connecting channels has more than equaled expectations, and although freight rates have not been unusually high they have been profitable in every line. It is the great movement of freight that is most wonderful, however, and now with the season nearing a close elevators are blocked to overflowing with a grain crop equalled only by that of last year, which was largely left over to increase the business of the present season.

The only fear now is a blockade from the inability of elevators and railways to care for the grain in the west and take it from vessels at Buffalo. As yet no serious delays to vessels have occurred on this account, and chartering goes on at 4 cents from Duluth and 2¼ cents from Chicago to Buffalo, the demand in the case of Chicago being limited, however, on account of the disadvantages arising from delay in handling the grain. Ore freights still rule strong with vessels in great demand at $1.30 from the head of Lake Superior and 80 cents from Escanaba, while the supply of coal for all Lake Michigan ports is more liberal than at any time during the season, at advanced rates.

Lumber Movement and Lumber Freights.

Again the lumber dealers of both the Lake Superior and Saginaw valley districts find large supplies of their product at upper lake ports unprovided for, with navigation nearing a close, and at this writing $4 a thousand is offered on lumber from the head of Lake Superior to Chicago and $3.50 to Buffalo, while the rate from Bay City to Buffalo is $2.25. Shippers are trying to get vessels to take cargoes from Bay City to Cleveland at $1.75 but they will be forced to pay a higher rate. These unusual advances are all due to the fact that vessel owners, as well as the lumbermen themselves, have been slow in taking into account the wonderful growth of lumber interests in the vicinity of Ashland, Duluth and Superior, and tonnage suitable to this trade has not been provided in proportion to the increase in business.

When the present season of navigation is closed a very large quantity of lumber, partly sold and intended for the eastern trade, will be found on dock at these Lake Superior ports. The cut this season in Duluth and vicinity alone, taking no account of the big Ashland cut, which is shipped almost entirely by water, will be above 300,000,000 feet. The great bulk of the Duluth and Superior lumber is for the northwestern trade, but still the shipments by water are important, as they will amount to about 60,000,000 feet this season.

Trying to Avoid Extended Litigation.

At least three important collision cases, which involve big losses and have attracted a great deal of attention on the lakes, are now as well as settled without court action of any kind. These are the Aurora-Peck case, growing out of the sinking of of the Peck in the Sault river ; Briton-Progress case, involving the loss of the Progress in the Detroit river, and the Norman-Republic case, in which a loss of about equal importance to both boats is involved. All that remains of the Aurora-Peck case is the actual settlement in money, which has been agreed upon, while the owners and underwriters in the Briton and Progress are delayed in fixing up differences by only one stockholder owning an interest of a few thousand dollars in the Progress. In the third case, that of the Norman and Republic, the owners, with consent of the underwriters, ordered the crews to make statements to attorney Harvey D. Goulder of Cleveland immediately after the accident, and his opinion as to the fault of the collision, will, as soon as it is revealed, very probably govern a settlement, as the entire damages are but about $12,000.

Other cases now being discussed at a conference of owners, underwriters and attorneys, which began in Chicago Wednesday, resulted from collisions between the steamers Brazil and Mather, Pillsbury and Nahant and Nipigon and Vienna. Of these the Nipigon-Vienna case is most important, as it involves the total loss of the Vienna, which was sunk several weeks ago on Lake Superior just above the Sault. There is some hope of a settlement, but the owners of the Vienna claim that the Nipigon was entirely at fault, and it may be necessary to fight the case out in extended litigation.

At several general meetings of vessel owners within the past two or three years various plans for arbitration of this kind have been suggested, and it was proposed at one annual meeting of the Lake Carriers' Association to prepare a set of rules to govern an arbitration committee, but nothing definite resulted from the discussion. The present movement has resulted from vessel owners and underwriters growing tired of their disputes being held in court for months and years, and finally resulting in many cases in a division of damages. In the Armour-Marion colision case, for instance, Judge Jenkins, of the United States district court, Milwaukee, twice decided that damages must be divided, to the dissatisfaction of parties on both sides, and now the case will go to the court of appeals. The Card-Iron Chief case, decided last week by District Judge Swan of Detroit will also go to the appelate court.

Some Facts Regarding Competition in Ore.

All through the Lake Superior mining region and in some lower lake cities, a great cry has gone up regarding danger of competition from increased importation of Cuban ore. This is natural in political times, and it is also to be expected that some misstatements will be made in discussing for political purposes a question of this kind. To lake interests, however, the subject is a matter of the highest business importance, and misstatements regarding it should not go uncorrected. Everybody having a financial interest in the mining and transportation of Lake Superior ore (the exceptions are so rare as to be unimportant) favors a high protective tariff, and no fears of competition from Cuban ore are entertained under the present tariff. In fact, some well informed ore producers advance the opinion that even in event of a removal of the duty of 75 cents a ton, which is very improbable, the iron ore interests in the Pittsburgh district, the Mahoning valley and the great central west would not suffer materially from it. They are, of course, most earnestly opposed, with the iron ore interests of the east, to such a reduction, as it would be a step towards the breaking down of the protective system in the entire iron industry.

These facts are given here simply in explanation of a situation that is entirely plain to every sales agent who handles a pound of iron ore, as well as the vessel owner whose interests are in the same direction. This season the amount of Lake Superior iron ore going to Erie and Buffalo for shipment east of the Alleghenies is smaller than in previous seasons, probably not amounting in the aggregate to 150,000 tons. Even this ore does not come into competition with the Cuban product, and the Lake Superior producers decided long ago that little could be expected from any attempt to compete with the native ores of New York, New Jersey, Pennsylvania and other eastern states. At the same time they are fully assured, especially with the present tariff, that the long rail haul from the seaboaard is an effective barrier to any competition from foreign ores in the Pittsburgh district and other furnace localities where they enjoy a monopoly of the trade.

William L. Brown of Chicago has been elected president of the Chicago Ship Building Company, succeeding the late Emmons Blaine.

Record of Speed and Big Cargoes.

[*Masters or owners of freight boats are invited to report improvements on this list.*]

Iron ore: Maritana, Minnesota Steamship Company of Cleveland, 4,260 gross, or 4,771 net tons, Escanaba to South Chicago; Maryland, Inter-Ocean Transportation Company of Milwaukee, 3,663 gross, or 4,103 net tons, Escanaba to South Chicago, draft 17 feet 4 inches.

Grain: E. C. Pope, Eddy Bros. of Bay City, 125,730 bushels of corn, Chicago to Buffalo; same steamer, 120,191 bushels of wheat, Chicago to Buffalo; Onoko, Minch estate, Cleveland, 113,829 bushels of wheat, Chicago to Buffalo; W. H. Gilcher, J. C. Gilchrist of Cleveland, 113,820 bushels of wheat, Chicago to Buffalo.

Coal: E. C. Pope, Eddy Bros. of Bay City, 3,950 net tons anthracite, Buffalo to Chicago.

Speed: Owego, Union Line of Buffalo, Buffalo to Chicago, 889 miles, 54 hours and 16 minutes, 16.4 miles an hour.

Iron Mining.

VALUE OF LEADING STOCKS.

Quoted by Chas. H. Potter & Co., No. 104 Superior St. Cleveland, O.

Stocks.	Par Value.	Bid.	Asked.
Cleveland-Cliffs Iron Company	$100 00	$.....	$ 63 00
Champion Iron Company	25 00	.....	58 00
Chandler Iron Company	25 00	.....	46 00
Jackson Iron Company	25 00	.....	75 00
Lake Superior Iron Company	25 00	40 00	42 00
Minnesota Iron Company	100 00	70 00	75 00
Pittsburgh & Lake Angeline Iron Co.	25 00	.....	145 00
Republic Iron Company	25 00	10 00	12 00
Ashland	25 00	.....	.....
Section Thirty-three	25 00	.....	5 00
Brotherton	25 00	2 00	2 50
Iron Belt	25 00	2 00	2 50
Aurora	25 00	8 25	.....

Shipments of iron ore from Two Harbors up to and including Wednesday, Oct. 19, aggregated 1,047,679 gross tons, of which 598,725 tons were from the Chandler, 435,456 tons from the Minnesota, 2,525 tons from the Pioneer and 11,046 tons from the Zenith mine. On the same date shipments from Ashland aggregated 2,026,540 gross tons, divided among the different mines as follows: Ashland 179,570 tons, Aurora 281,290, Colby, No. 1, 4,961, Colby, No. 2, 51,850, Rand 17,700, Tilden 215,931, Iron Belt 147,027, Montreal, south vein, 3,383, Montreal, north vein, 31,233, Palms 76,323, Section 33, south vein 6,924, Section 33, north vein 3,133, Anvil 5,637, Brotherton 95,130, Comet 37,974, Carey 45,272, Newport 122,866, Imperial 5,803, Norrie 385,410, East Norrie 168,928, Odanah 5,652, Pabst 48,110, Eureka 8,317, Sunday Lake 46,305, Windsor 27,973, Jack Pot 3,805.

A sample car load of Mesaba ore from the Mountain Iron Company's property has been received at Duluth and a small quantity of this ore will be shipped by lake before the close of the season. The Mountain Iron, Biwabik and one or two other companies are now making every preparation for the sale of ore this fall and liberal shipments next season. Owners of the Biwabik claim that recent drilling proves that the ore body is 1,100 feet wide, an average of 90 feet in depth and half a mile long.

A scarcity of labor is complained of at several of the larger mines of the Menominee range. Increased activity in these mines must mean that considerable unsold ore is being shipped, notwitstanding recent advances in lake freights.

Explanation of the Canal Tolls.

In view of the fact that there is considerable misapprehension among brokers and vesel owners regarding the levy of tolls on grain from Fort William and other Canadian ports, Earhart & Co., Duluth, issue a circular stating that in his proclamation the president expressly states that a toll of 20 cents per ton shall be levied on all freight passing through the St. Mary's falls canal "in transit to any port of the dominion of Canada," whether carried in vessels of the United States or other nations. The only statement giving credence to the idea that tolls would be collected on grain bound for American ports to be exported to Canada was a circular issued Sept. 10 and withdrawn Sept. 19. Thus it is entirely inmaterial where grain originates so long as it is consigned to and landed at United States ports.

Gaul, Goth and Greek are names assigned to three big freight steamers now building in Belfast for the Union Steamship Company's service between England and South America.

Lake Carriers' Association.

M. A. BRADLEY. President.

VICE-PRESIDENTS: James W. Millen, Detroit, Mich. — John G. Keith, Chicago, Ill. — Frank J. Firth, Erie, Pa. — W. S. Brainard, Toledo, O. — Thomas Wilson, Cleveland, O. — R. P. Fitzgerald, Milwaukee, Wis. — Peter F. Miller, Buffalo, N.Y. — Alex. McDougall, Duluth, Minn.

Charles H. Keep, Secretary, Buffalo, N.Y. Geo. P. McKay, Treasurer, Cleveland, O.
Harvey D. Goulder, Counsel, Cleveland, O.

Secretary Charles H. Keep of Buffalo says that no attempt will be made to map out a line of proceedure with reference to legislation important to the lakes in the next session of congress until a week or two previous to the opening of the session, when the legislative committee composed of Buffalo managers of the association will be called together. It is probable that the vessel interests will not bring up in this session a bill to regulate raft towing, but will ask instead that congress appoint a commission to investigate the subject. This may cause delay, probably for a full season, but it is thought that in the end the result will be more satisfactory, as an investigation of the rafting question can not end unfavorably to the vessel owners, and the report of a government commission would give the committee on commerce an opportunity to present a bill that would in all probability withstand the objections of the rafting interests and would be favorably received by congress. The bill for new aids to navigation, which failed of passage in the last session, will also be vigorously pushed in the next session, and in addition it is expected that something will be done toward securing the passage of a measure that will admit of the collection of reliable statistics relative to lake commerce. The bill requiring vessel masters to report to customs officers at all ports where cargo is taken on or discharged, which was killed on account of objections from the Detroit & Cleveland Steam Navigation Company, Goodrich Transportation Company and other lines doing business at a great number of ports, will probably be revived and so amended as to permit the officers of package freight lines, in the discretion of the secretary of the treasury, to report their full season's business within a stated period after the close of navigation. This would permit of monthly or even weekly reports being prepared in all lines of lake commerce excepting package freight, which could be added at the close of the season.

If the recommendations of the naval officers who met at Detroit in conference with a committee from the association are accepted by the light-house board, the four light-ships to be secured from the Eleven-Foot shoal appropriation of $60,000 will be of wood, about 80 feet long, 20 feet beam, and 8 feet depth of hold, and will cost about $5,000 each without equipment, or a little more than $13,000 each including equipment. This would leave a balance for maintenance of the vessels for one year. The inspectors recommend, as expected, that one vessel be stationed to cover Eleven-Foot and Corona shoals; one at or near Gravelly island shoal, Poverty island passage; one at the end of Peshtigo shoal, southerly end of Green bay, and the fourth at the lower end of Lake Huron, preferably near Corsica shoal.

Stocks of Grain.

The following table prepared from the Chicago Board of Trade report of the visible supply of grain on Saturday the 22nd inst., shows with comparisons stocks of wheat and corn in store at points of accumulation important to the lake traffic:

	WHEAT, BUSHELS.		CORN, BUSHELS.	
	Oct. 22, '92.	Oct. 15, '92.	Oct. 22, '92.	Oct. 15, '92.
Chicago	8,967,000	8,932,000	6,355,000	5,445,000
Duluth	4,977,000	4,289,000	.....	.....
Milwaukee	1,517,000	1,430,000	10,000	11,000
Detroit	1,026,000	1,110,000	34,000	25,000
Toledo	3,672,000	3,517,000	255,600	220,000
Buffalo	2,609,000	2,174,000	871,000	590,000
New York	13,993,000	12,682,000	1,697,000	1,441,000
Baltimore	2,003,000	2,004,000	305,000	172,000
Philadelphia	1,696,000	1,700,000	208,000	268,000
Boston	114,000	250,000	241,000	199,000
Montreal	398,000	324,000	18,000	19,900

Tho statement shows that at five lake shipping ports, Chicago, Duluth, Milwaukee, Detroit and Toledo, the net increase for the week is 881,000 bushels of wheat and 104,000 bushels of corn, while at Buffalo and the five principal exporting ports on the seaboard, New York Baltimore, Philadelphia, Boston and Montreal, the net increase in wheat is 1,679,000 bushels and in corn 651,000 bushels.

MARINE REVIEW for one year and Patterson's Nautical Dictionary for $6.

CHICAGO LAKE INTERESTS.

WESTERN OFFICE, MARINE REVIEW,
No. 13 Western Union Building, CHICAGO, Ill., Oct. 27.

A well defined rumor has been afloat for some time that the Chicago Ship Building Company would construct a steel freight steamer, which was to be temporarily used during the world's fair as a passenger boat between the lake front and Jackson park. The rumor stated that the boat would have twin screws, and the plating would not be put on between decks until after the fair. Manager Babcock has had such a plan in mind for nearly a year, but capitalists have not seen their way clear towards the practical solution of the question of building a passenger steamer and then converting her into a freight boat. That expense would be between $20,000 and $30,000, and it will be a big sum for a boat to clear before any profits go to her owners. It is now said that enough people have become interested in the plan to insure its success. Those in the deal refuse to give any information, as they say publication would be premature.

The naval display at the world's fair dedication would have been ludicrous had anybody noticed it. The ancient moss-back, Michigan, and the cutters were there. That was all. At the time of the Grant monument unveiling a year ago, Chicago marine men got up a fine naval display. The old man-of-war Michigan was here, and was to be the flagship. Soundings were taken a few days before and it was foand that the boat could get within easy distance of shore. All promised well. The morning of the display the Michigan came to an anchorage about three times as far from shore as she ought to have been, thus forcing all the boats far out into the lake. Although there was a fine marine band on board the old ship, it was sent ashore. So thoroughly disgusted were marine men generally with the course of the naval officers, that they dropped out of naval displays thereafter. The Michigan has since changed commanders, but the feeling that the merchant marine would get the small end of the stick was too strong to be overcome.

Capt. James Reid, the Bay City wrecker, who was in town this week, stated that Mr. Sibley had "given him fits" for not going down to New York and bidding on the wreck of Vanderbilt's yacht. Capt. Reid was confident that he could have had the boat afloat long before this, and, considering the failure of the wreckers, said that he might yet see what he could do. The yacht which cost nearly a million was sold for $35,000.

Some newspapers and many citizens of Chicago are charging the Society for the Prevention of Smoke with conspiracy to force the people into the hands of the Standard Oil Company and Reading trust. They do not, however, make out a case against the society. As a matter of fact, the society was formed by a large number of citizens, who believed it was the only way to abate the smoke nuisance, and other leading lake ports may expect a crusade along the same line. No reform, which ever reformed anything, did not arouse the bitter opposition of the people who thought their rights were being trampled upon. The society, in selecting the river as the first place to use compulsion, apparently did the marine interests a grave injustice, but the reform had to begin somewhere. Although the tug boats have been burning hard coal for some time, the society has not shown anything like the same energy in fighting railroads and other smoke producers. In fact, it is too apparent that whenever the society runs up against a corporation or individual having much influence, its hands are softly gloved, and it is always ready for any kind of a compromise. Thus, while it is plain that there is no conspiracy in the movement to do away with smoke, the society is making bad mistakes in not treating all offenders alike, and the injustice can but recoil upon its officers.

Canadian Lumber Business.

Special Correspondence to the MARINE REVIEW.

KINGSTON, Ont., Oct. 27.—This season's cut of lumber is so much larger than that of last year that manufacturers have already filled nearly all their contracts. Many Americans are visiting the smaller mills in the back country and buying the outputs for the New York market, hence manufacturers are very independent.

The sale of timber limits, which it was proposed to postpone until an export duty was placed on logs, was held by the Ontario government on the 13th inst., and buyers were present from various states in the union. The amount realized by the government was $2,308,475. The highest aggregate price paid for any one berth was $373,650 by G. W. Pack of Alpena, Mich., and the highest figure for one mill was $17,500.

When the Rome & Watertown road was opened in the fifties the company put on a $100,000 steamer between Cape Vincent and Montreal. The boat didn't pay so she was laid up in the graveyard at Garden Island where she lay until the company sold her to Calvin & Breck for only $4,000. She was elegantly furnished and her tableware was of solid silver, many pieces of which are now in domestic use and highly prized.

A remarkable judgment has just been given at Montreal in a marine suit. A sailor named Peterson applied for a discharge from the schooner Bass Rock and demanded his wages in full, on the ground that the food supplied and the water on board were unfit for consumption, notwithstanding that Capt. Hughes had been notified of the fact. The matter came before a magistrate, who took the evidence of the crew. It showed that the captain had been informed of the state of the food, etc., had took no action and did not hold even an investigation. The application of the sailor for discharge was granted by the magistrate and the captain ordered to pay his wages in full.

Lake Marine Naval Parade.

EDITOR MARINE REVIEW:—It strikes me that while this country is making such strenuous efforts to assure the success of the world's fair, the shipping interests of the great lakes have it in their power to contribute an attraction which will prove more instructive to a greater number than any other one feature. As is, or ought to be, well known, the class of tonage now afloat on the lakes has no equal anywhere in the world either for quality or general adaptability. I wish to suggest the holding on some given day a grand parade or review of as many of the steam freighters as shall at that time be in commission as possible. It has been the writer's privilege to hear many expressions of incredulity amongst people not informed as to the extent of lake shipping on hearing or reading descriptions of it, and he has also been a witness to many manifestations of surprise at its reality. But when the whole craft now building at some of the lake shipyards are added to the splendid fleet already in service, and these all unite in one grand parade, it would be a sight the like of which has never before been seen and would go farther towards emphasizing the resources and progress of the great west than acres of buildings filled with products from all parts of the world. Think of the grand sight such fleets as the Lehigh, Union, Northern, Anchor, Minnesota, Western, Menominee, Mutual, Bradley, Gilchrist, Whitney, Eddy, Inter-ocean and a score of others, with such steamers as the Weed, Gilbert, Pope, Castalia, and two or three hundred more, not forgetting the famous "pigs," would present passing in view before the assembled hosts of all nations. It is not for me to work out the arrangements of detail. I merely make the suggestion, but I hope it will not be thrown aside till it has at least been well considered and found impracticable. I hope to see the opinions of others on the subject in your columns.

DETROIT, MICH., Oct. 24, 1892. D.

Emergency Elevators Brought Into Use.

Special Correspondence to the MARINE REVIEW.

BUFFALO, N. Y., Oct. 27.—There is reason to fear that the harbor elevators will run over before the end of the season. Though the situation differs considerably in some regards from last fall, when even before this time there had been delays to grain-laden vessels, it is probable that the utmost we can expect is to come out even with the end of the season. There is no very trustworthy way of finding out the exact condition of elevator capacity. The reports of grain in store seldom make them more than a quarter full, but as all grain checked out for shipment is omitted from the reports very little can be learned from that source. Tallymen say that it is a matter of close figureing to get large cargoes taken care of, and though the elevator men are given to reporting room enough it is observed that the opening a few days ago of the Watson elevator for business has been followed this week by an order to set the Richmond and Brown elevators in readiness. As all these houses are without track connections and must depend on the canal for delivery they are used only in emergencies. This brings forward the queer effect that two seasons, seemingly so much alike, have had on the canal. Last fall, with vessels waiting weeks to unload, the canal was obliged to retire in disgrace before the season was closed by winter, just because the roads had possession of all the grain and managed to keep hold of it in spite of the blockade and threats of law suits on the part of vessel men. Now everything is changed so far as the canal is concerned. Not only has it been doing all it could for a month or more, but every boat from the lumber and other trades that can carry grain is pressed into the service and yet the freight is up to 6½ cents this week on wheat to New York, a rate that is never looked for in ordinary seasons. But for the losing trade by canal for the past two seasons the fleet would now be of such respectable proportions that it could be depended on to relieve the elevators at almost any time, but 30 boats of 8,000 bushels each is now a large day's work, which at present is far short of the daily grain receipts which are ruling at about 1,000,000 bushels. Why the roads were able last fall to command the situation and keep the grain away from the canal and are so entirely unable to do so now is not explained, beyond that it may have proven poor policy to bite off so much more than they could chew, for it is known that they time and again paid two or three storages on grain that they could not carry rather than see it given to the canal, which was ready and anxious to carry it at a low rate. It is to be hoped that the elevators can keep ahead of their work and there is as yet only a surmise that they are not going to. Privately, those who have grown very tired of the howl against idle elevators, are not sorry to see them all come into need now and then. It is practically impossible to provide each season just the amount of room needed. If there was now a half more room than there is the business would be in better shape than it is.

Official Numbers and Tonnage.

The bureau of navigation, E. C. O'Brien commissioner, assigned official numbers to only two lake vessels during the week ending Saturday, Oct. 15: They were the tug Elk, built and owned at Grand Haven, Mich., 57.34 tons gross, 28.67 net, No. 136,333; and the schooner Aberdeen, built and owned in West Bay City, 1,045.84 tons gross, 993.55 net, No. 106,975.

She Was Lacking in Power.

How plain now to naval architects, vessel owners, and in fact everybody possessing even a limited knowledge of the requirements as to power in large steam vessels, is the main cause of failure in the Great Eastern. Her power was entirely out of proportion to her great length and other dimensions. The dimensions of Atlantic liners are now approaching nearly to the size of the Great Eastern. The length of the Great Eastern was 680 feet and her horse power 7,650. The new Cunard liner Campania, launched a few weeks ago, is 620 feet long, but her horse power will be 30,000, and it is said that the boat which the White Star line proposes to build at Belfast, Ireland, will be 700 feet long. It is the difference in power to which attention is called, however, and in this connection the following table, showing dimensions and power of vessels constructed since the Great Eastern disappointed a waiting public thirty-four years ago, will prove interesting:

Name.	Date.	Length Feet.	Breadth Feet.	Horse Power.
Great Eastern	1858	680	82	7,650
Britannic	1874	455	46	5,500
Arizona	1879	450	45	6,300
Servia	1881	515	52	10,300
Alaska	1881	500	50	10,500
City of Rome	1881	546	51	11,800
Aurania	1882	470	57	8,500
Oregon	1883	500	54	8,375
America	1884	432	51	7,354
Umbria	1884	501.5	57.2	14,321
Lahn	1887	465	49	9,500
City of Paris	1888	500	63	20,605
Augusta-Victoria	1889	480	56	14,110
Columbia	1889	480	56	13,680
Teutonic	1890	550	57.5	13,000
Normania	1890	520	57 1-4	16,352
Spree	1890	485	52	13,000
Fuerst Bismarck	1891	502.5	57.5	16,412
Campania	1892	620	65.3	30,000

Thus the explanation of the Great Eastern's failure as shown was her great lack of power.

Simply a Superior Canard.

A few weeks ago, John D. Rockefeller of the Standard Oil company, Frederick Morse of the Illinois Steel company, H. C. Frick, manager of the Carnegie works, and other prominent capitalists were the guests of Samuel Mather of Pickands, Mather & Co., Cleveland, owners in and representatives of the Minnesota Iron company and the Minnesota Steamship company, on a trip to the head of Lake Superior, aboard one of the boats of the steamship company. It was simply a pleasure trip, but ever since these gentlemen visited the Vermillion iron mining district certain Duluth and Superior newspapers have been printing and telegraphing to other newspapers throughout the country wild and ridiculous stories about a great combination of Carnegie, Minnesota Iron and Illinois Steel interests. All well informed people in the iron business know that John D. Rockefeller and other capitalists identified with him in various enterprises is now, and has been for some time past, a stockholder in the Minnesota Iron company, and it is almost unnecessary to say that the Cleveland representatives of this company deny any knowledge of the "consolidation" here referred to. Of course all of these visionary tales connect the American Steel Barge company, Duluth and Superior with the new combine, and an amusing feature of one of them is the statement that the Minnesota Iron Company is to absorb the Illinois Steel Company. Without any intention of reflecting upon the importance of the mining corporation, it may be in order to remark that this would be a very small tail wagging a big dog.

Exact Figures on the Latest Big Cargoes.

The steamer E. C. Pope's cargo of wheat, 120,191 bushels, delivered at Buffalo last week from Chicago, is a little larger than the big cargo of corn, 125,730 bushels, carried last season by the same boat from Chicago to Buffalo. This gives to the Pope the honor of having carried the largest cargoes of both wheat and corn ever put into a lake vessel. The propeller, Gilbert's big flour cargo from Duluth, also delivered last week, was exactly 28,340 barrels.

Location of Lake Life Saving Stations.

Outside of government documents, which are not available to all captains and crews, there is no publication giving correctly the location of all life saving stations on the lakes. The name of keeper and post office address is given in a number of publications, but the location of stations, which is most important, is omitted. The Review publishes the information thinking that it may prove valuable to vessels getting ashore or meeting with accidents otherwise in the vicinity of the stations. The different stations are located as follows:

Lake Ontario—
- North side mouth of Big Sandy Creek.
- East side mouth of Salmon Creek.
- East side entrance of Charlotte Harbor.

Lake Erie—
- South side entrance to Buffalo harbor.
- North side entrance to Erie harbor.
- West side entrance to Fairport harbor.
- West side entrance to Cleveland harbor.
- Point Marblehead, near quarry docks.

Lake Huron—
- Inside Sand Beach harbor.
- Near Point aux Barques light.
- One mile northwest of Grindstone City.
- Near Ottawa point light.
- Near Sturgeon point light.
- Near Thunder bay island light.
- North end of Middle island.
- Hammond's bay.

Lake Superior—
- Vermillion point, 10 miles west of Whitefish point.
- Crisp's, 16 miles west of Whitefish point.
- Near mouth of Two Heart river.
- Muskalonge lake, near mouth of Sucker river.
- Near north end of Old Partage Lake ship-canal.

Lake Michigan—
- Near Beaver island light.
- Near Pickard's wharf, North Manitou island.
- Near Point Betsey light.
- South side entrance to Frankfort harbor.
- North side entrance to Manistee harbor.
- One mile south of Grande Pointe au Sable light.
- North side entrance to Ludington harbor.
- North side entrance to Pentwater harbor.
- North side entrance White lake, White river.
- North side entrance of harbor Port Sherman, Muskegon.
- North side entrance to South Haven harbor.
- North side entrance to Grand Haven harbor.
- South side of Holland harbor.
- North side of St. Joseph harbor.
- East side entrance to Michigan City harbor.
- Chicago harbor.
- Northwestern University grounds, Evanston.
- Washington island, Kenosha harbor.
- Racine harbor.
- South side Milwaukee harbor near entrance.
- East side of Sheboygan harbor.
- North side of Two Rivers harbor entrance.
- Eastern entrance, Sturgeon bay canal, north side.

In addition to the United States life saving stations enumerated above the Canadian government pays crews of six men $1.50 each for drilling twice a month and a coxswain $75 for the season at the following places on the lakes: Collingwood, Goderich, Pelee island, Poplar point, Port Hope, Port Rowan, Port Stanley, Toronto and Wellington, Ont.

GET TWO SUBSCRIBERS TO THE MARINE REVIEW AND YOU WILL RECEIVE A COPY OF THE LIFE AND VOYAGES OF CHRISTOPHER COLUMBUS.

MARINE REVIEW.

DEVOTED TO THE LAKE MARINE AND KINDRED INTERESTS.

JOHN M. MULROONEY, ... } PROPRIETORS.
F. M. BARTON, ... }
HOMER J. CARR, . . . Associate Editor and Manager Chicago Office, Western Union Building, 110 LaSalle Street.

Published every Thursday at No. 516 Perry-Payne Building, Cleveland, O.

SUBSCRIPTION—$2.00 per year in advance. Convenient binders sent, post paid, 75 cents. Advertising rates on application.

The books of the United States treasury department contain the names of 3,600 vessels, measuring 1,154,870.38 tons in the lake trade. In classification of this fleet the lakes have more steamboats of 1,000 to 2,500 tons than the combined ownership of this class of vessels in all other sections of the country. The number of vessels of 1,000 to 2,500 tons on the lakes on June 30, 1891, was 310 and their aggregate gross tonnage 512,787.58; in all other parts of the country the number of this class of vessels was, on the same date, 213 and their gross tonnage 319,750.84. The classification of the entire lake fleet is as follows:

Class.	Number.	Tonnage.
Steam vessels	1,592	756,751.53
Sailing vessels	1,243	325,131.06
Canal boats	703	72,515.42
Barges	62	20,472.37
Total	3,600	1,154,870.38

Tonnage built on the lakes during the past five years, according to the reports of the United States commissioner of navigation, is as follows:

	No. of boats.	Net Tonnage.
1887	152	56,488.32
1888	222	101,102.87
1889	225	107,080.30
1890	218	108,515.00
1891	204	111,856.45
Total	1,021	485,042.94

St. Mary's Falls and Suez canal traffic: Number of boats through St. Mary's Falls canal in 1890, 228 days of navigation, 10,557; tonnage, net registered, 8,454,435. Number of boats through Suez canal during 1890, full year, 3,389; tonnage, net registered, 6,890,014. Number of boats through St. Mary's Falls canal in 1891, 225 days of navigation, 10,191; tonnage, net registered, 8,400,685. Number of boats through Suez canal during 1891, full year, 4,207; tonnage, net registered, 8,698,777.

Entered at Cleveland Post Office as Second-class Mail Matter.

IN ANOTHER part of this issue a Detroit correspondent, who very modestly signs the letter "D," instead of his full name, of which the communication is certainly deserving, suggests that on some given day a grand parade or review of lake steam vessels be given in connection with the great attractions attending the World's Columbian Exposition at Chicago. What a magnificent sight this would be to America's guests assembled from all parts of the civilized world. No account of the magnitude of lake shipping need be recited here to prove that the vessel owners now have it within their power to contribute to the fair an object lesson in inland shipping that would be as far-reaching as all the efforts of previous years to attract attention to this commerce. As our correspondent says "it would be a sight the like of which has never before been seen, and would go farther toward emphasizing the resources and progress of the great west than acres of buildings filled with products from all parts of the world." Who will lead a movement along the line of this most valuable suggestion? No greater tribute could be paid to the skill of lake shipbuilders or the great extent of their interests here, and they will be lacking in enterprise if they do not contribute encouragement to the scheme if life can be put into it. It is not impossible to assemble off the fair grounds at Chicago more than one hundred of the finest steel vessels flying the stars and stripes, and to this might be added many times that number of wooden steamers fit to do credit to the navy of any nation on the globe. Of course, the cost of such an undertaking would be great—probably too great to admit of any hope of the scheme being carried out—but the opportunity is certainly deserving of earnest consideration by the leaders of lake commerce, who have shown themselves equal to undertakings of greater magnitude but not more important.

THROUGH the Associated Press the executive officers of the light-house board have set up a cry about certain newspapers on the lakes criticising their attitude in the past toward navigation interests, and they proceed to make a parade of their great efforts to light the St. Mary's river, so that it can be navigated by night as well as by day. Gen. Poe and Capt. Read have submitted a plan, they say, whereby a system of crib and float lights, light ships and patrol boats is to be established at a cost of $145,562, if the vessel owners will turn in and help the board to secure the required appropriation. It is reasonable to suppose that any scheme with which Gen. Poe is connected is practicable, and the vessel owners will very probably make an effort to secure the appropriation, but it is amusing to note the present attitude of these officers of the board. Their opinion of the influence of lake shipping interests has changed wonderfully within a very short period. The magnitude of Lake Superior shipping demands of this board a perfect system of lighting for the Sault river, but it is to be hoped that when improvement is made in the present system it will be by officers other than those now in charge at Washington, who have done everything in their power to make it unpleasant for the interests involved, and are now only trying to save their heads by a cry of persecution.

THE sentiment of the Buffalo canal convention was, according to telegraphic reports, overwhelmingly against federal aid. The convention declared that the commercial supremacy of the state had been won because of the waterways and that it still depended upon them; that the canals must be preserved by money from the tax payers of the state and that federal aid is not wanted and will not be asked. All this is good enough on the surface, but it must be remembered that the convention was largely a gathering of canal men. Other citizens of New York state, who are very numerous, and who succeeded in defeating a canal appropriation bill last year, were not in it. As a centennial celebration, or a representative gathering of canal men, the Buffalo meeting was a success, but measures more radical than those advocated by the convention are necessary before hope can be entertained of competition with the railways now controlling the business of the northwest that halts at Buffalo.

ZENAS KING, pioneer iron bridge builder of this country, and founder of the King Iron Bridge and Manufacturing Company, died at his home in Cleveland Tuesday. The King works, which are among the largest of their kind in the country, are known on the lakes through the building of hoisting and conveying machinery.

More Schemes for Canal Boat Propulsion.

Buffalo newspapers have again gone to discussing the feasibility of applying the trolley system after the style of electric street railways to the propulsion of canal boats. In a letter to the canal convention last week, Governor Flower referred to the numerous ideas already expressed on the subject, and now the opinions of electrical engineers and practical canal men are being sought in an effort to get the state legislature to make an appropriation for experimental purposes.

A new steam canal boat of peculiar design, which will make a trip from Buffalo to New York city with 7,000 bushels of wheat, is also attracting attention. H. C. Bender of Morristown, Pa., is the inventor. The paddle wheels on this boat are four-bladed and are 4 feet wide and 4 feet in diameter. They are incased in two air-tight cylinders, placed one on each side of the boat's keel, and they project slightly below the bottom of the boat. Their location dispenses with the use of shafting. The engine is of 45 horse power and will, it is claimed, drive the boat at a rate of six miles an hour.

Coal shipments from Buffalo last week aggregated 157,745 tons.

A 1,000,000-foot raft in tow of the tug Goldsmith went ashore in Green Bay and destroyed $1,000 worth of pound nets. When a storm came up lines were run ashore on Chambers' island and made fast to trees, but they parted.

The number of whalebacks now in the carrying trade on the lakes is surprising. Twelve of them passed Port Huron within twenty-four hours last week. They were the steamers Mather, Wilson, Bartlett, Hoyt and Colgate, and the barges 101, 103, 105, 115, 116, 117 and 118. Of ten vessels that cleared from Duluth last week six were whalebacks, and their cargoes aggregated 510,048 bushels.

Gen. Poe has been authorized to advertise for proposals for the deep waterway project between Chicago, Duluth and Buffalo. Bids will probably be opened some time next month and submitted to the secretary of war immediately, so that the contract can be let about Dec. 1, giving the successful bidders time to prepare for the beginning of work as soon as the ice breaks up in the spring.

Local Inspectors Fitzgerald and Chapman of Milwaukee have revoked the licenses of Captains C. B. Coates and Bernard Wilds, who were in charge of the steamers Douglas and Alice E. Wilds when they collided in mid-lake off Milwaukee, in June last, resulting in the sinking of the latter boat. The testimony showed that Capt. Coates of the Douglas had abandoned his watch to an unlicensed lookout twenty minutes previous to the collision, and was in his room when the boats came together; also that Capt. Wilds saw the masthead lights of the Douglas twenty minutes before she struck, but could not see her side lights, owing to the mist lying low on the water, and yet neglected to sound his whistle as a warning of impending danger. In fact, no whistle was sounded by either steamer, and both were running at full speed.

As a result of Col. Wm. Ludlow's duties being lessened and those of Gen. O. M. Poe increased by the former officer being relieved of light-house work, Gen. Casey, chief of engineers, has ordered the transfer from Gen. Poe's department to that of Col. Dudlow of all government work on the rivers and harbors of lower Michigan, excepting that of the deep water channel. This gives Col. Ludlow control of the Sand Beach harbor of refuge, Cheboygan river, Thunder Bay harbor, Au Sable harbor, Saginaw river, Black river, Clinton river and Rouge river. The transfer will be completed on or before Nov. 1. Col. Ludlow's new duties will take up a part, if not all, of the time which was formerly given to the light-house department. At the same time the change will enable Gen. Poe to give more of his time and attention to a supervision of what is known as the northwest division, of which he has been chief officer for the past three years.

Work of the Ship Yards.

City of Kalamazoo is the name given to the passenger steamer launched on Saturday last by the Williams Transportation Company of South Haven, Mich.

Again it is said that the Crystal Beach Steamboat Company of Buffalo will either build or purchase a passenger boat to replace the steamer Pearl, taken to Chicago for the world's fair service.

Lighthouse officials were so pleased with the lighthouse tenders Lilac and Columbine, that they have decided not to deduct $8,000 forfeiture for delay in delivery, which was due to failure to receive the steel plates from the mills.

The steamer Wyandotte, built by the Detroit Dry Dock Company for the Clark estate, to replace the small steamer Riverside in the service between Detroit and the islands and towns down the river to its mouth, began daily trips last week. The boat is entirely satisfactory to its owners and is said to be very fast. The Riverside, which became the property of the dry dock company upon the delivery of the Wyandotte, has been sold to W. F. Sullivan of Detroit. She takes the place of the City of New Baltimore between Detroit and Marine City.

F. W. Wheeler & Co. of West Bay City are informed that the last of the four light-ships built for the government has reached its destination on the Atlantic coast near Charleston. The tug W. G. Wilmot, built by the same firm, was taken through the St. Lawrence river and canals last week on her way to New Orleans.

The new schooner building by Wheeler & Co. of West Bay City for Colin McLaughlin and others of Detroit will be 10 feet longer and 2 feet wider than the John C. Fitzpatrick, thus making her by long odds the largest schooner on the lakes. An interest in the boat was recently sold to John Heisner and Capt. George Harper, both of Bay City.

Capt. James Davidson of West Bay City is quoted as saying that, in addition to the work already under way at his yard, he expects to put down several more keels for wooden boats this winter. He began work this week on another schooner. If the present freight rates hold out to the close of the season it will not be surprising to see other builders of wooden boats, as well as Capt. Davidson, begin work that will increase very materially the large amount of tonnage already under contract.

Electric Lighting on Lake Steamers.

All of the best class of steamers, both passenger and freight, now leaving lake ship yards are equipped with electric lighting plants, and the business has reached the highest degree of perfection. The dynamo shown in a supplement accompanying this issue is the product of the Fisher Electric Company of Detroit, who have made a specialty of steamboat lighting, and have plants on nine-tenths of the steamers equipped in this way. The list includes every class of lake carriers, and as shown in previous issues of the REVIEW, the work of this company has been earnestly recommended by every owner who has had a vessel equipped by them. The Fisher Company takes special pride in the fact that they have never been compelled to have an electrician accompany a steamer after a plant has been installed.

This company has just completed the lighting plant on Ann Arbor car ferry, No. 1, building at the yard of the Craig Ship Building Company, Toledo, and it is expected the boat will leave for Lake Michigan this week. As these car ferries are heavy wooden boats the use of incandescent plants was recommended by the underwriters, so as to reduce the risk from fire to the minimum. Each boat will have a dynamo and direct connected engine, capable of operating 150 incandescent lamps, and a 5,000 candle power search light. All of the ponderous machinery for driving these boats is located below the main deck and the electric apparatus will therefore be in constant operation as long as the boats are in service. The tracks on the main deck are lighted by seventy-five incandescent lamps, enabling employes to examine at all times the appliances used for securing the cars to the deck. The boats are divided into seven circuits, and the crew's quarters, dining room, kitchen and all departments have electric lamps.

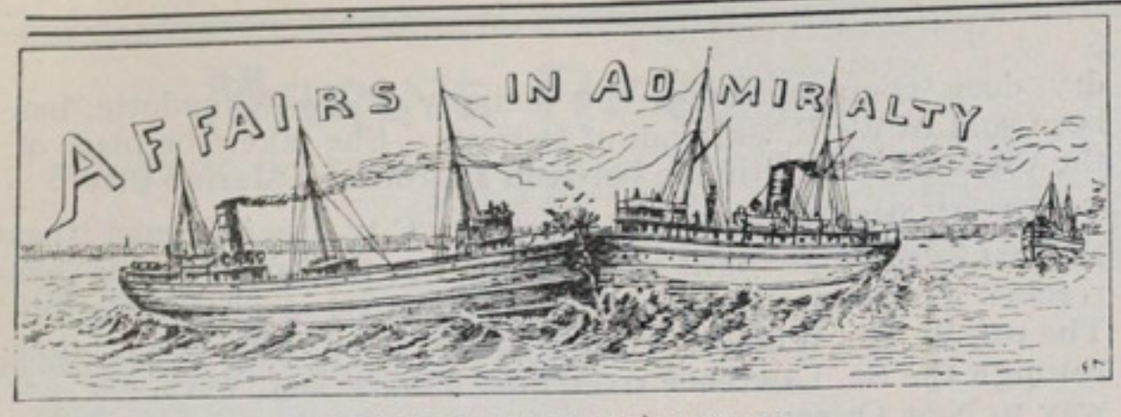
Trade Notes.

The steam yacht Comanche, illustrated in this issue, is in every way the production of a lake shipyard. The elegant fit-out, which it was at first thought would have to come from New York, was furnished by J. W. Grover & Sons.

Warrington water tube boilers will be put in the Dunham tug Mollie Spencer at Chicago and she will have her engines compounded. Capt. Dunham says: "Water tube boilers have been in use in yachts around this city for the past three years, but have not been used in large lake steamers or tugs. It is an inovation with me, but I have come to the conclusion that sooner or later a water tube boiler of some kind will come into general use where high pressure steam is needed for compound or triple expansion engines."

Capt. E. W. Dorsey of the Goodrich line, whose latest command was the steamer Indiana, from which he retired last May on account of illness, died Tuesday at his home in Chicago.

Secretary Keep of the Lake Carriers' Association, Secretary Thompson of the Duluth chamber of commerce, Hon. F. W. Wheeler of West Bay City, and C. A. Macdonald of the insurance company of Crosby, Macdonald & Co., Chicago, were all visitors in Cleveland within the past few days.



DUTY OF SAILING VESSELS.

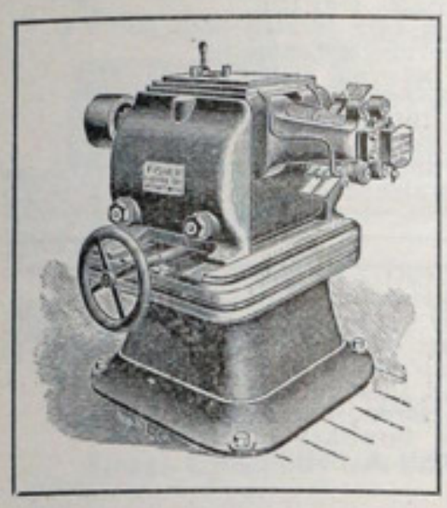
The following important statement of the respective legal duties of steam vessels and sailing vessels in avoiding collisions is gathered from the able opinion lately delivered by Judge Swan, in deciding the collision case of the steamer Iron Chief and schooner J. F. Card. It appears that about 9 o'clock in the evening of July 24, 1891, the weather being clear and the wind fresh from the northwest, the schooner J. F. Card, bound down, collided with the steamer Iron Chief and tow, bound up, near the upper end of the narrow channel above Round island, at the junction of the St. Mary's river and Waiska bay. The Card had sailed down Lake Superior and upon reaching Waiska bay although the wind was fair she did not at once attempt to sail down the river and made several stretches across the bay. When the steamer and tow rounded Point Aux Pins the schooner was well down into the bight of the bay and standing across towards the upper end of the narrow channel above Round island. Those in charge of the steamer took no precautions to avoid the schooner at this time because, as they claim, they thought the schooner was bound up the lake, the indication being that she had been lying at anchor over in the bay, or else that a tug had let go of her there and that she was working her way out. Moreover she had crossed without entering the upper entrance to the southerly channel, usually taken by sailing vessels bound down. After the Iron Chief had entered the narrow channel she checked down and waited for the Card to either pass the upper entrance of the channel or to come in stays. When close to the black stake at the upper end of the channel, the schooner suddenly begun to pay off and turned as though to come down the channel, and from her maneuvers she evidently intended, and the court finds that it was her actual intention, to pass the Iron Chief port to port in such a channel. The Iron Chief at once blew a signal of one blast and worked over close to the red stake channel bank. After the schooner had commenced swinging as above, her helm was suddenly put down and an attempt was made to luff her up. In this attempt she failed and ran into the port side of the Iron Chief and then glancing off she passed under the stern of the steamer and ran into the consort of the steamer, the consort being grounded on the north bank of the channel. The principal fault which was charged against the steamer was that under the circumstances she was bound to keep out of the schooner's way. Judge Swan says that "while the law requires a steam vessel meeting a sailing vessel to keep out of the latter's way, it is equally positive that the sailing vessel shall hold her course. The obligation of the steam vessel to perform its duty under this rule is not absolute and unqualified but is dependent upon the adherance of the sailing vessel to her course. Were it otherwise the occurrence of the collision would be decisive of the liability of the steamer." The court then finds that as a matter of fact the actual and intended course of the schooner was to pass the steamer port to port; and further finds that had she continued swinging as she started to swing she could have left the steamer and tow to port. And he finds that the collision is chargeable solely to the schooner's change of course in that her helm was changed and an attempt made to luff her and that this is so whether her ceasing to swing was due to improper handling, or to the inability of the schooner to make the course which she attempted to do; and the court further finds that the schooner is blamable for needlessly attempting a course which invited risk of collision. Of the management of the steamer Judge Swan says that "it is clear from these proofs that the master of the Iron Chief correctly divined the intended course of the schooner down the channel, and his judgment was confirmed as the vessels neared each other, until the schooner stopped swinging before she reached mid-channel, where she was heading on to the steamer at an angle of four points; the steamer was then as far to the northerly side of the channel as she could safely get. It is claimed that she should have stopped. Stopping would have only precipitated the collision, which had then become evident, unless the schooner paid off. In that situation the steamer was not bound to stop. The only possibility of avoiding the collision lay in her going ahead at full speed and thus clear the schooner." The court concluded that the collision was not caused by any fault of the Iron Chief and the libel was dismissed with costs.

SHERMAN–OLYMPIA CASE.

Another case decided by Judge Swan at Detroit this week is of value, as it limits the blame of collisions where it occurs through unforeseen and unavoidable circumstances. Owners and insurers of the schooner John Sherman sought to recover the loss of that vessel sunk just below Walkerville in the Detroit river, May 8, 1891, by collision with the steamer Olympia. The Sherman was lumber-laden, bonnd down in tow of the Lowell, the Roberts being in the tow behind the Sherman. The Olympia was coal laden and bound up, having gone toward the American side at Detroit to pick up the marine reporter. To put her on her course her wheel was ported, until Belle isle was on her port bow. She was not quite abreast of the Lowell at that time and she was heading just under the stern of the Roberts. To preserve this course and check her swing the wheel was starboarded, but it failed to have the desired effect, seeing which the master ordered it hard-a-starboard. In obeying this order the tiller rope slackened on the barrel, indicating that it had broken. The master at once signalled the engineer to stop and back, which was promptly done. He instantly followed those orders by sounding three or four alarm whistles to the Lowell and her tow, three or four lengths away. The effect in reversing the Olympia's engines was to swing her stern to port and bow to starboard and her headway was such that although the engines were working astern she was carried across the current, until stern on she struck the Sherman, cutting into her four or five feet, springing her deck and throwing her masts out of line. The Sherman's wheel was starboarded as soon as the Olympia whistled the alarm, but owing to her position in the tow she could not get out of the way. The libel claimed the Olympia did not keep her course and did not promptly stop. The answer charged that the Sherman was weak and unseaworthy and that the effect of the collision was due in large part to that fact. Judge Swan said: "The proofs aquit the Sherman and Olympia of the omission of any measure which would have averted the collision after the breaking of the wheel rope. The primary inquiry is whether its cause was any defect in the equipment of the Olympia against which due care and skill could have provided." He concludes there was not, and adds: "It is not enough to exempt a vessel from the consequences of injury to life and property traceable to the sudden collapse of the guiding power, that the material was originally of the best quality and that closest attention be paid to their preservation. The same considerations which exact from a vessel propelled by steam the utmost care in navigation because of her speed and power more forcibly require that the machinery for keeping her course shall be equal to that end, so far as reasonable care and skill can make and maintain it. There is a seeming hardship in leaving an injured party innocent of fault to bear the consequences of a misfortune without redress against the person or thing causing the loss. Yet the imposition of liability for any part of the loss upon one not culpable would not only be a judicial wrong but its effects would be disastrous to the safety of life and property, by removing a strong incentive to the exercise of care and skill in the conduct of every occupation and business. The loss must rest where it has fallen and the libel must be dismissed. The circumstances justified the filing of the libel,as only judicial inquiry could have elicited the evidence. If it had appeared that an equally full showing of the proofs in the Olympia's defense had been made prior to the filing of the libel I should have followed the American rule and allowed costs to claimants, but under the circumstances no costs will be allowed."

The case of the S. B. Pomeroy against the Canadian propeller Pacific for injuries received by collision in the Sault river two years ago was dismissed on account of contradictory testimony and the slight injuries received by the Pomeroy. Judge Swan depended in part on the weather report for that day for not holding the steamer liable.

Henry R. Worthington, one of the largest manufacturers of steam pumps in the United States, has opened a branch office at 1762 Larimer street, Denver, Col. A full line of pumps, water motors and repair parts will be carried in stock. The establishment of a branch office was made necessary by the increasing business in the west.



READ THE LIST OF THE BEST CLASS OF STEAMERS

ON THE LAKES EQUIPPED WITH

FISHER ELECTRIC LIGHTING PLANTS.

Yachts.

Whilaway ..... 25 lights.
Steel yacht Princess ..... 20 "
Col. Reynolds yacht, Sigma, (direct connected set), 140 "
Mr. H. M. Hanna's yacht, Comanche, (two direct connected sets) ..... 250 "
Mr. W. J. White's yacht, Say When, (direct connected set) ..... 100 "

Miscellaneous Steamers.

Sam'l Mitchell ..... 225 lights and one search light.
S. R. Kirby ..... 200 lights.
John W. Moore ..... 150 "
Maryland ..... 425 "
Pathfinder (whaleback) 225 incandescents and two arc lights.
Pioneer, (direct connected set, 150 incandescents and two arc lights.
Arthur Orr, (direct connected set) ..... 150 lights.
Thomas Maytham, (direct connected set) ..... 150 "
Castalia, (another plant removed) ..... 200 "

LINES AND FLEETS.

Northern Steamship Co.

North Star ..... 225 lights.
North Wind ..... 225 "
Northern Light ..... 225 "
Northern Queen ..... 225 "
Northern King ..... 225 "

Lehigh Valley Transportation Co.

E. P. Wilbur ..... 300 lights.
Cayuga ..... 300 "
Seneca ..... 300 "
Saranac ..... 300 "

Lake Superior Iron Co.

Griffin ..... 225 lights.
Wawatam ..... 225 "
La Salle, (another plant removed) ..... 200 "
Joliet, (another plant removed) ..... 200 "

Mutual Transportation Co.

Cambria ..... 225 lights.
Corsica ..... 225 "
Corona ..... 225 "

Minnesota Steamship Co.

Marina ..... 225 incandescents and two arc lights.
Masaba ..... 225 " " " " "
Maritana ..... 400 light dynamo " " " "
Mariposa ..... 400 " " " " " "

Anchor Line Steamship Co.

Codorus ..... 225 lights.
Schuylkill ..... 225 "

Passenger Steamers.

Frank E. Kirby ..... 200 lights.
Greyhound ..... 60 "
Pilgrim ..... 60 "
Bon Voyage ..... 75 "
City of Detroit No. 1, (another plant removed) ... 650 "
City of Detroit No. 2, (another plant removed) ... 650 "
City of Cleveland, (another plant removed ..... 650 "
City of Alpena, (two direct connected twin sets) ... 300 "
City of Mackinaw, " " " " " ... 300 "
City of Toledo ..... 250 "

Lake Erie Transportation Co.

S. C. Reynolds ..... 225 lights.
J. C. Gault, (direct connected generating set) ..... 225 "
Russel Sage, (direct connected generating set) .... 225 "

Menominee Transit Co.

Norman ..... 225 lights.
Roman ..... 225 "
Briton ..... 225 "
German ..... 225 "
Saxon ..... 225 "
Grecian ..... 225 "

Toledo & Ann Arbor Car Ferries.

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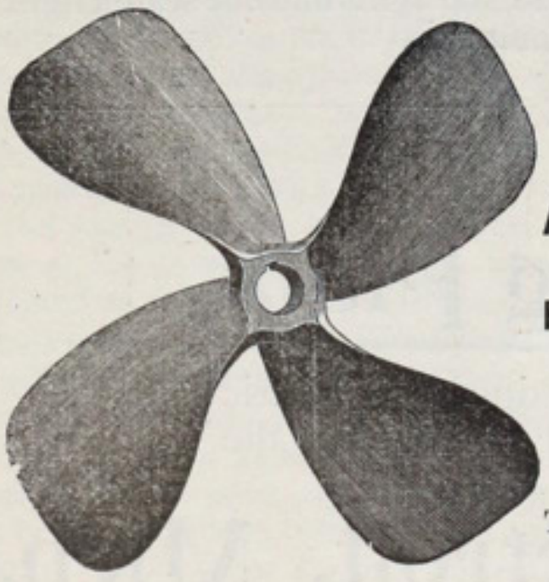

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UNITED STATES ENGINEER OFFICE, Burlington, Vt., October 24, 1892. Sealed proposals for blasting and removing 360 cubic yards of rock shoal, situated between Sistar Islands and Cross-Over Light, St, Lawrence River, N. Y., will be received at this office until 10 a. m., November 24, 1892, and then publicly opened. Specifications, blank forms, and all available information will be furnished on application to this office. 27-3-17

U. S. ENGINEER OFFICE, HICKOX BUILDing, 185 Euclid Avenue, Cleveland, Ohio, Sept. 30, 1892. Sealed proposals for Extension of Breakwater at Cleveland Harbor, Ohio, will be received at this office, until 2 o'clock P.M., of Thursday, October 20th, 1892, and then publicly opened. Specifications, blank forms, and all available information will be furnished on application to this office. JARED A. SMITH, Corps of Engineers, U. S. A.

U. S. ENGINEER OFFICE, HICKOX BUILDing, 185 Euclid Avenue, Cleveland, Ohio, September 30, 1892. Sealed proposals for Removal and Rebuilding of Piers at Ashtabula Harbor, Ohio, will be received at this office until 2 o'clock P.M. of Thursday, October 20, 1892, and then publicly opened. Specifications, blank forms, and all available information will be furnished on application to this office. JARED A. SMITH, Lieut.-Col. Corps of Engineers, U. S. A.

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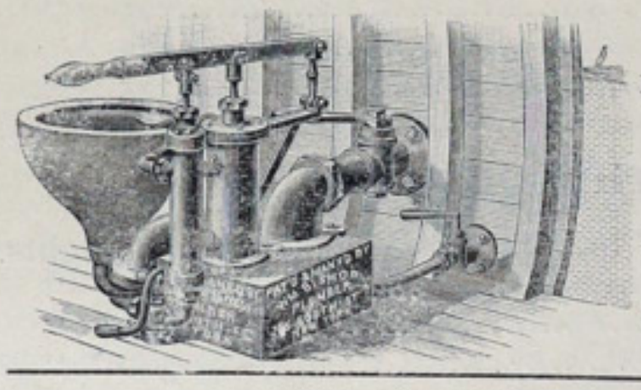

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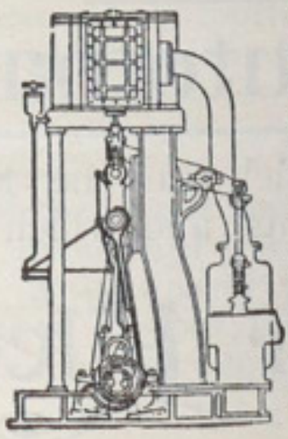

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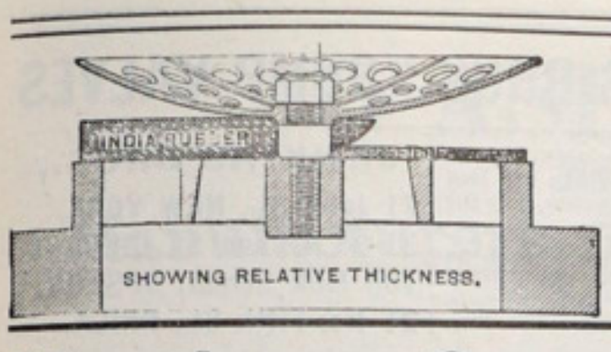

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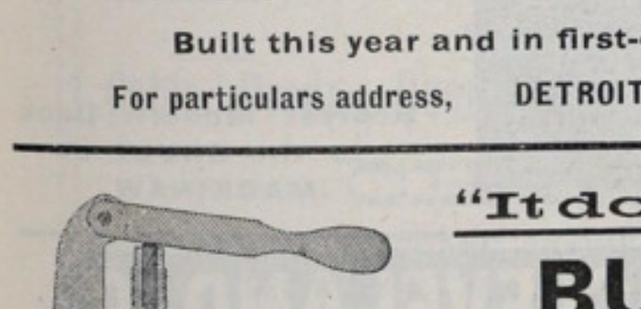
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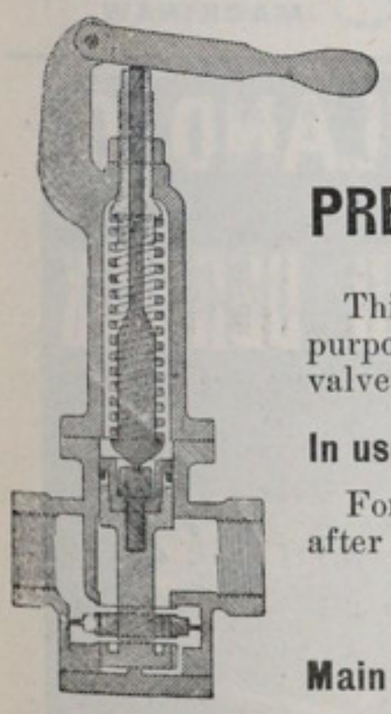

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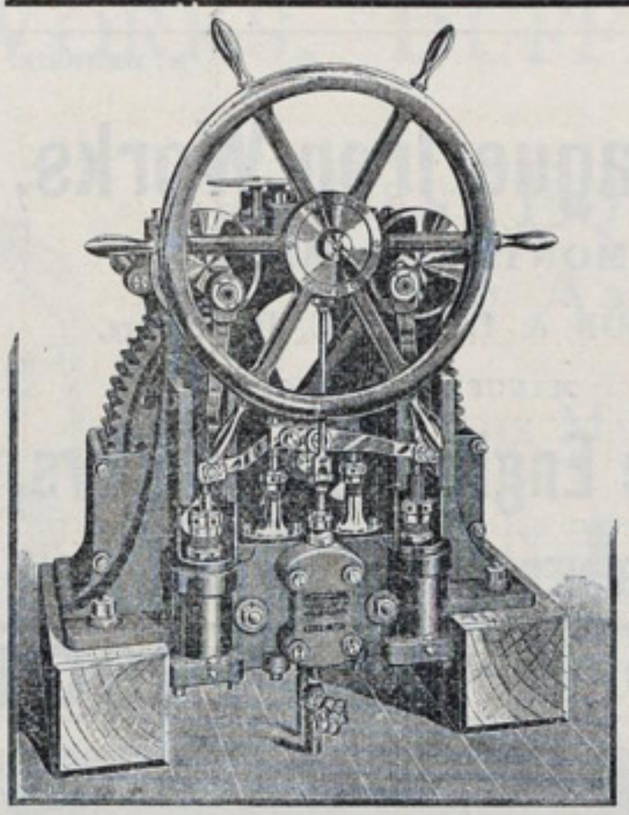

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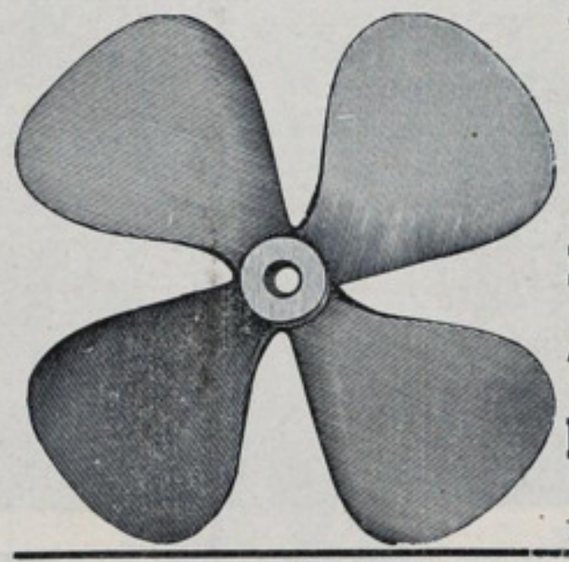

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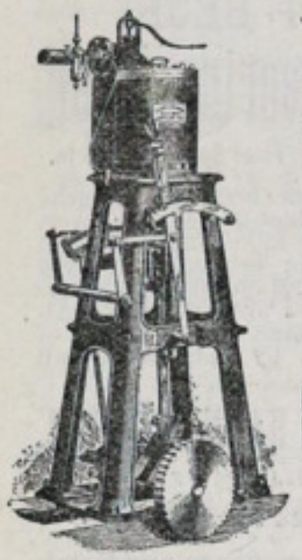

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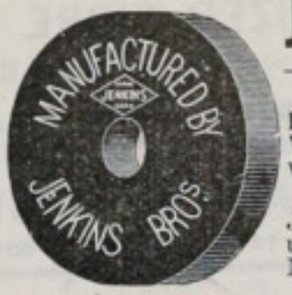

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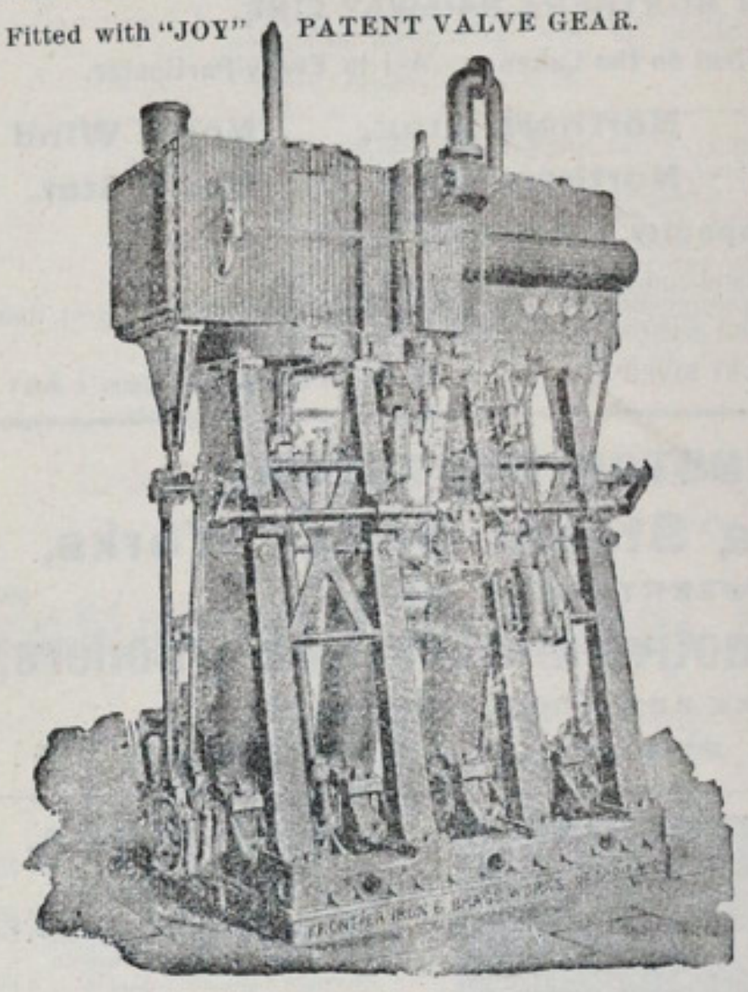

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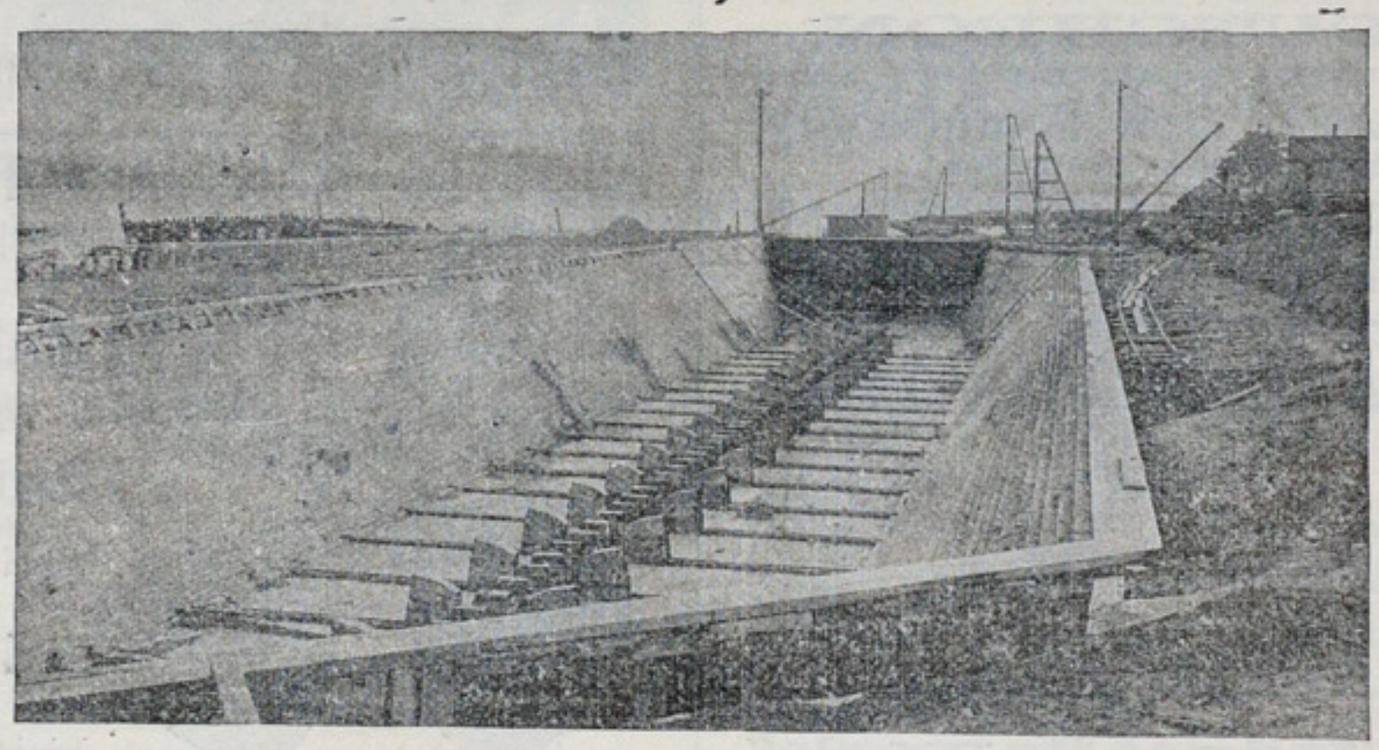

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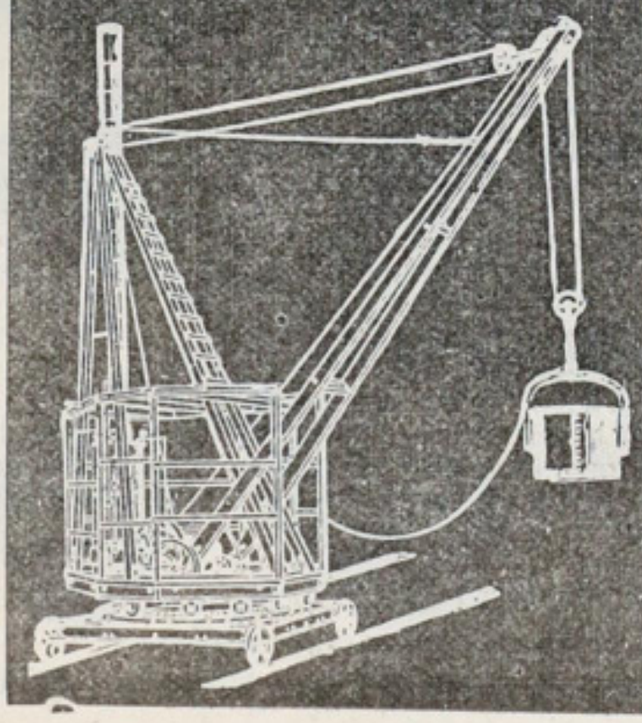

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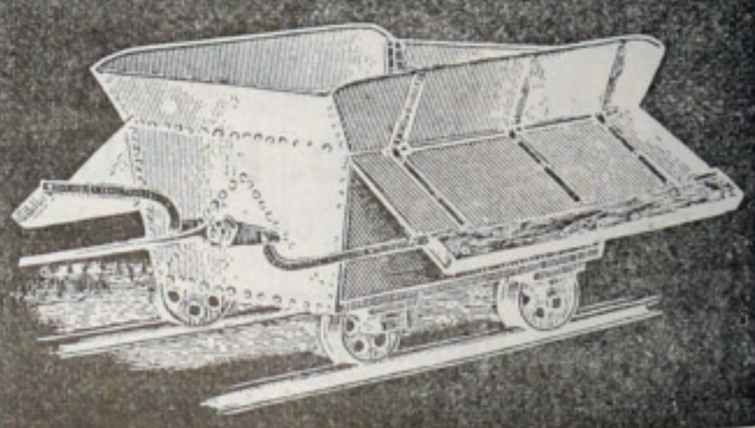

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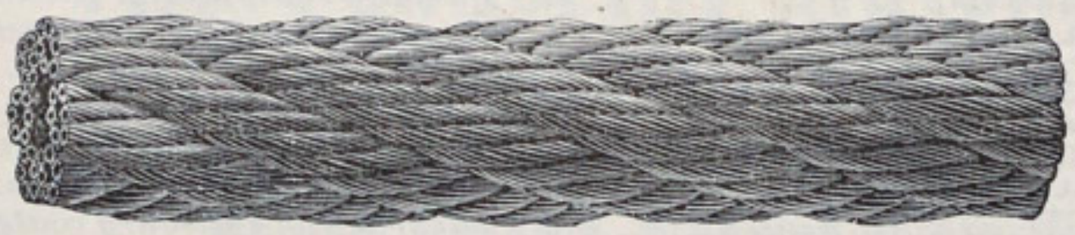

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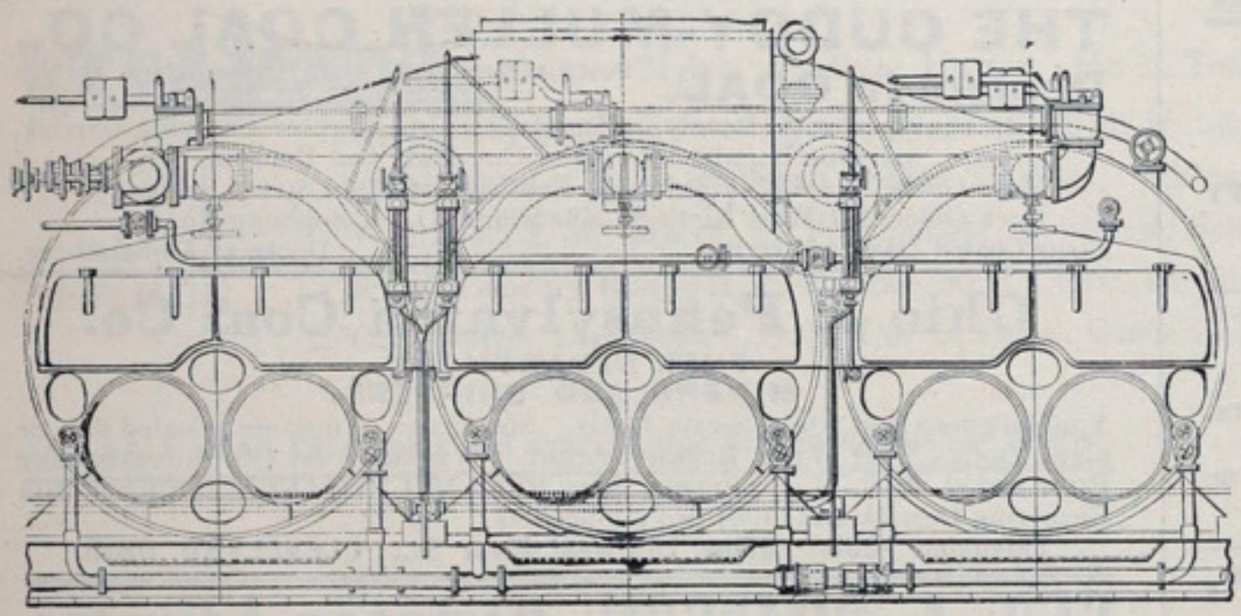

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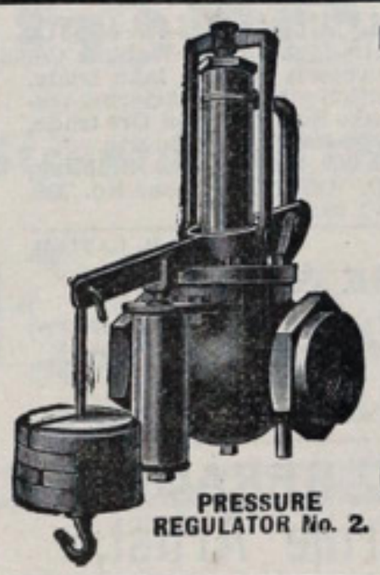

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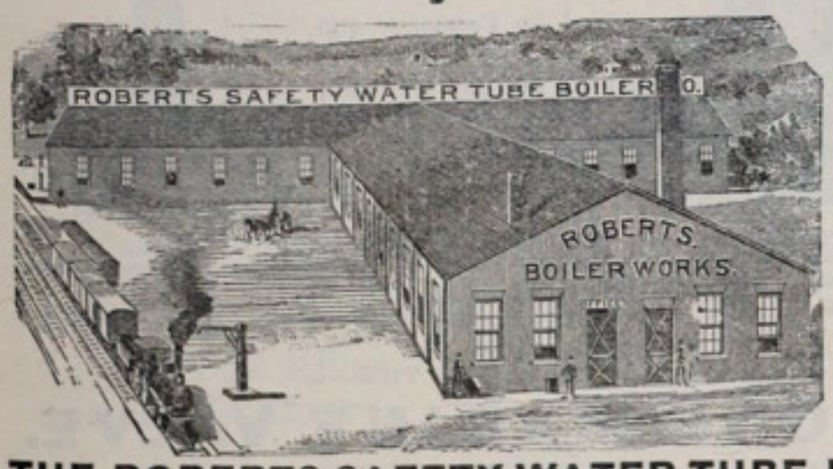

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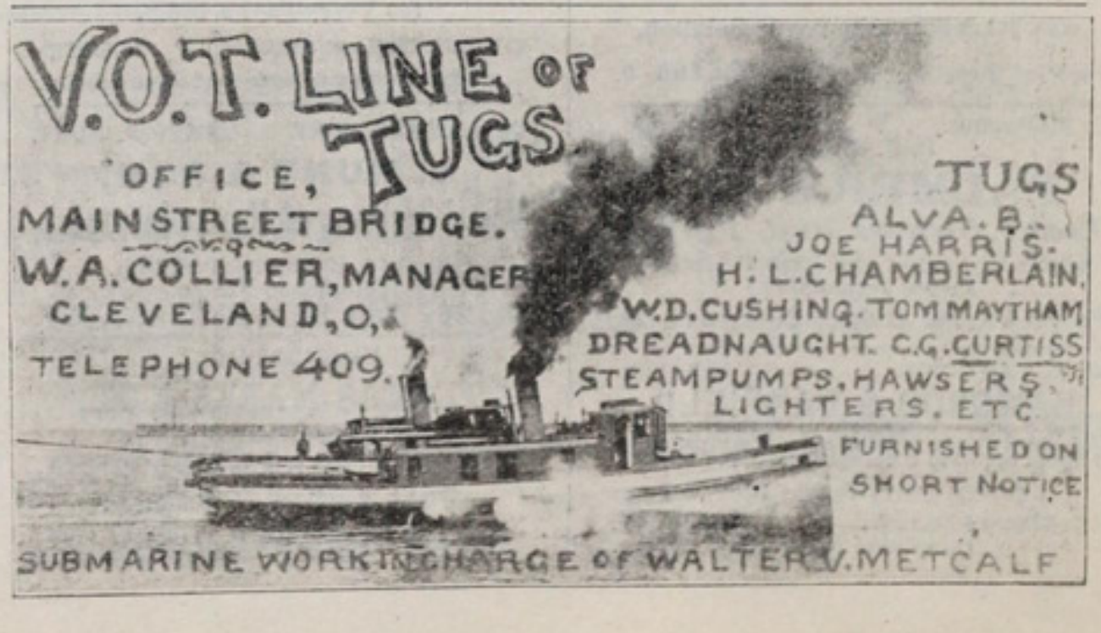

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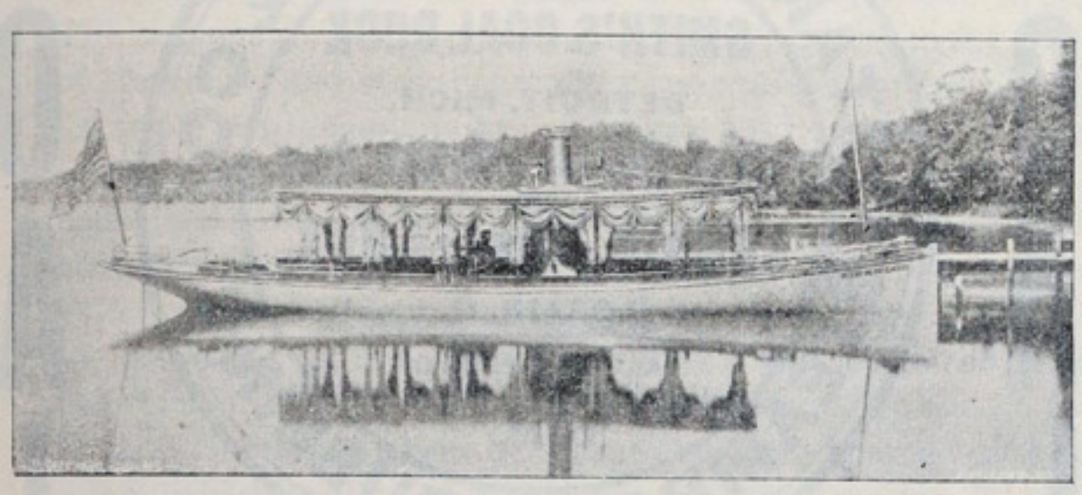

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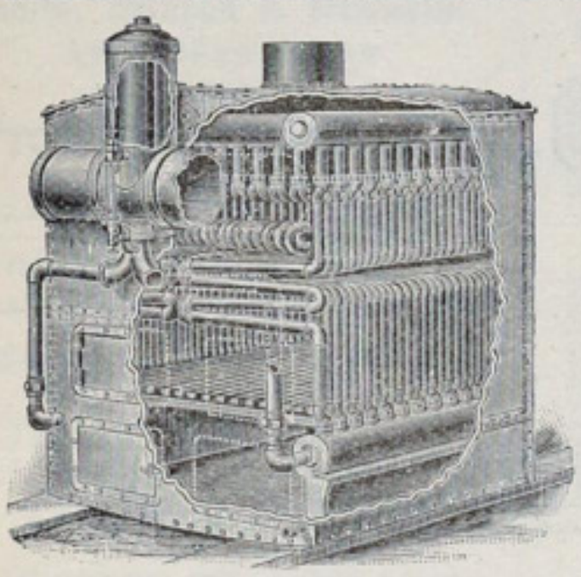

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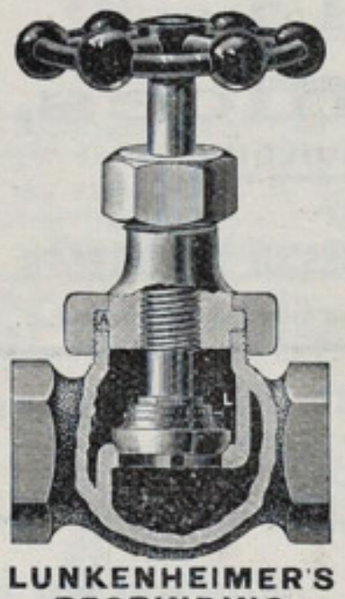

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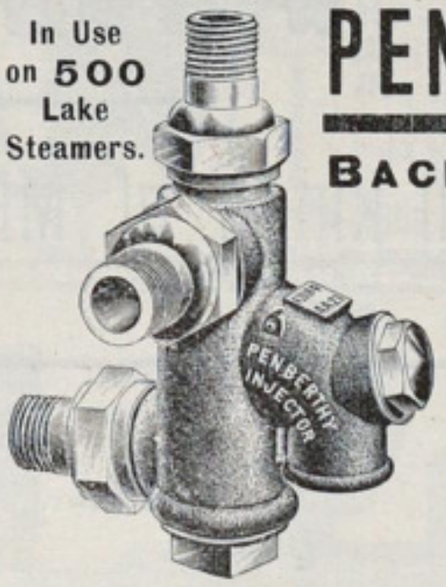

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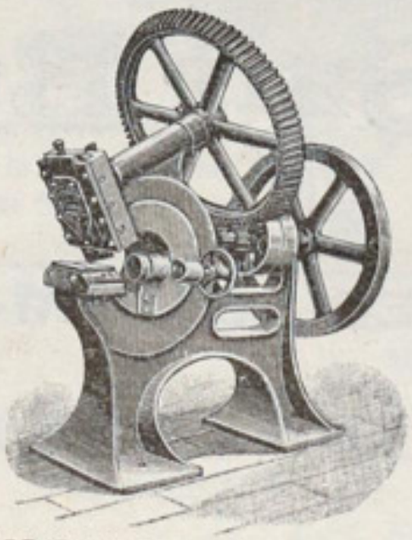

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